

AMENDMENTS

In the claims:

Please replace claims 1, 5 and 13 with the following claims:

1. A method of producing nuclear transfer embryos from donor cells of a species other than bovine and a recipient bovine oocyte comprising:
inducing the donor cells to undergo G₀ arrest;
fusing said donor cell to an enucleated recipient bovine oocyte to create a nuclear transfer embryo;
activating said nuclear transfer embryo; and
culturing the activated embryo to allow the embryo to undergo maternal to embryonic transition.

5. The method of claim 1 wherein said enucleated bovine recipient oocyte is prepared from a bovine oocyte undergoing nuclear maturation within 16 hours of beginning in vitro culture.

13. A method of producing nuclear transfer embryos from a donor cell of one species other than bovine and a bovine recipient oocyte comprising:

culturing non-bovine donor cells selected from the group consisting of embryonic derived cells, somatic cells, germ cells, and genetically modified cells in low serum medium so that said donor cells are induced to arrest in the G₀ stage of the cell cycle;

selecting a bovine recipient oocyte which has completed nuclear maturation before 16 hours from the beginning of in vitro culture;

enucleating said bovine recipient oocyte after 16-32 hours of in vitro culture;

placing said donor cell under the zone pellucida of the enucleated oocyte so that said donor cell contacts said enucleated oocyte;

fusing said donor cell with said enucleated oocyte by electric pulse at 16-32 hours after the beginning of in vitro culture to create a nuclear transfer embryo;

activating said nuclear transfer embryo by sequential incubation with ionomycin and 6-dimethylaminopurine at 16 to 32 hours after beginning of in vitro culture; and

culturing the nuclear transfer embryo to allow the embryo to undergo maternal to embryonic transition.

Please cancel claim 15.